

Endolymphatic Sac Tumor of The Temporal Bone



Behzad Saberi*

Medical Research, Iran

Submission: November 22, 2020; **Published:** November 30, 2020

***Corresponding author:** Behzad Saberi, Medical Research, Esfahan, Iran

Keywords: Endolymphatic sac tumor; Temporal bone

Opinion

Endolymphatic sac tumor of the temporal bone is a locally aggressive tumor which involves the sac and the endolymphatic duct. From the histological point of view, endolymphatic sac tumor can be described as a destructive papillary cystic adenomatous tumor. It can be sporadic or related to the von Hippel-Lindau disease. Chromosome 3p25 tumor suppressor gene's loss of function can cause von Hippel-Lindau which the patients with von Hippel-Lindau disease may have bilateral endolymphatic sac tumors. So, it is advisable to screen the patients with von Hippel-Lindau disease for the presence of bilateral endolymphatic sac tumors.

Patients with endolymphatic sac tumors can be presented with various symptoms like aural fullness, sensorineural hearing loss, vertigo and tinnitus which seemingly are due to endolymph's normal flow and resorption patterns obstruction which may cause endolymphatic hydrops. Lower cranial neuropathies, facial paralysis and brainstem compression symptoms can be seen in the late phases of the disease. Imaging studies of the patients with endolymphatic sac tumors can include MRI and CT. In comparison with the cerebellar white matter, the tumor can be isointense to hyperintense in T1 MRI imaging. If T1 would be done with contrast, the tumor will become strongly enhancing. In T2, the tumor would be heterogeneous, and it is because of the highly vascular nature of the tumor. Posterior fossa plate's bony destruction in addition to central calcifications which may also have extension to the mastoid can be seen in the CT.

The treatment for the patients with endolymphatic sac tumor would be done by surgery. During surgery, both dural surfaces should be removed so that the goal of complete removal of the tumor can be achieved. Preoperative embolization should be done in large tumors so that the amounts of blood loss can be minimized as much as possible. In the cases which hearing sparing would not be the goal, translabyrinthine approach would be the surgical choice while retrolabyrinthine and transdural approaches are the surgical options for the cases with small tumors which hearing sparing would be the goal.

References

1. Skalova A, Sima R, Bohus P, R Curik, J Lukas, et al. (2008) Endolymphatic sac tumor (aggressive papillary tumor of middle ear and temporal bone) Report of two cases with analysis of the VHL gene. *Pathol Res Pract* 204(8): 599-606.
2. Choo D, Shotland L, Mastroianni M, Gladys Glenn, Carter VW, et al. (2004) Endolymphatic sac tumors in von Hippel-Lindau disease. *J Neurosurg* 100(3): 480-487.
3. Michaels L (2007) Origin of endolymphatic sac tumor. *Head Neck Pathol* 1(2): 104-111.
4. Bae CW, Cho YH, Chung JW, Chang JK (2008) Endolymphatic sac tumors: report of four cases. *J Korean Neurosurg Soc* 44(4): 268-272.
5. Lonser RR, Kim HJ, Butman JA, Alexander OV, Daniel IC, et al. (2004) Tumors of the endolymphatic sac in von Hippel-Lindau disease. *N Engl J Med* 350: 2481-2486.
6. Bambakidis NC, Megerian CA, Ratcheson RA (2004) Differential grading of endolymphatic sac tumor extension by virtue of von Hippel-Lindau disease status. *Otol Neurotol* 25(5): 773-781.



This work is licensed under Creative Commons Attribution 4.0 License
DOI: [10.19080/JHNS.2020.04.555634](https://doi.org/10.19080/JHNS.2020.04.555634)

Your next submission with Juniper Publishers will reach you the below assets

- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats
(Pdf, E-pub, Full Text, Audio)
- Unceasing customer service

Track the below URL for one-step submission

<https://juniperpublishers.com/online-submission.php>